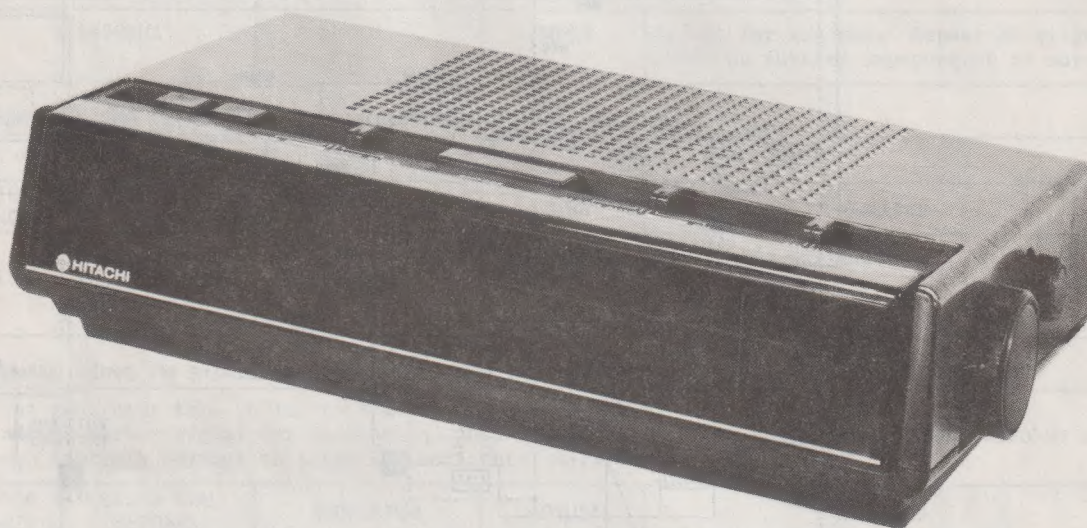


PHOTOFACT® Folder

with CIRCUITRACE™

HITACHI
MODEL KC-671H

For Supplier Address See PHOTOFACT Index

HITACHI
MODEL KC-671HHITACHI
MODEL KC-671H

Model KC-671H

HOWARD W. SAMS & CO., INC. Indianapolis, Indiana 46206

The listing of any available replacement part herein does not constitute in any case a recommendation, warranty or guaranty by Howard W. Sams & Co., Inc., as to the quality and suitability of such replacement part. The numbers of these parts have been compiled from information furnished to Howard W. Sams & Co., Inc., by the manufacturers of the particular type of replacement part listed.

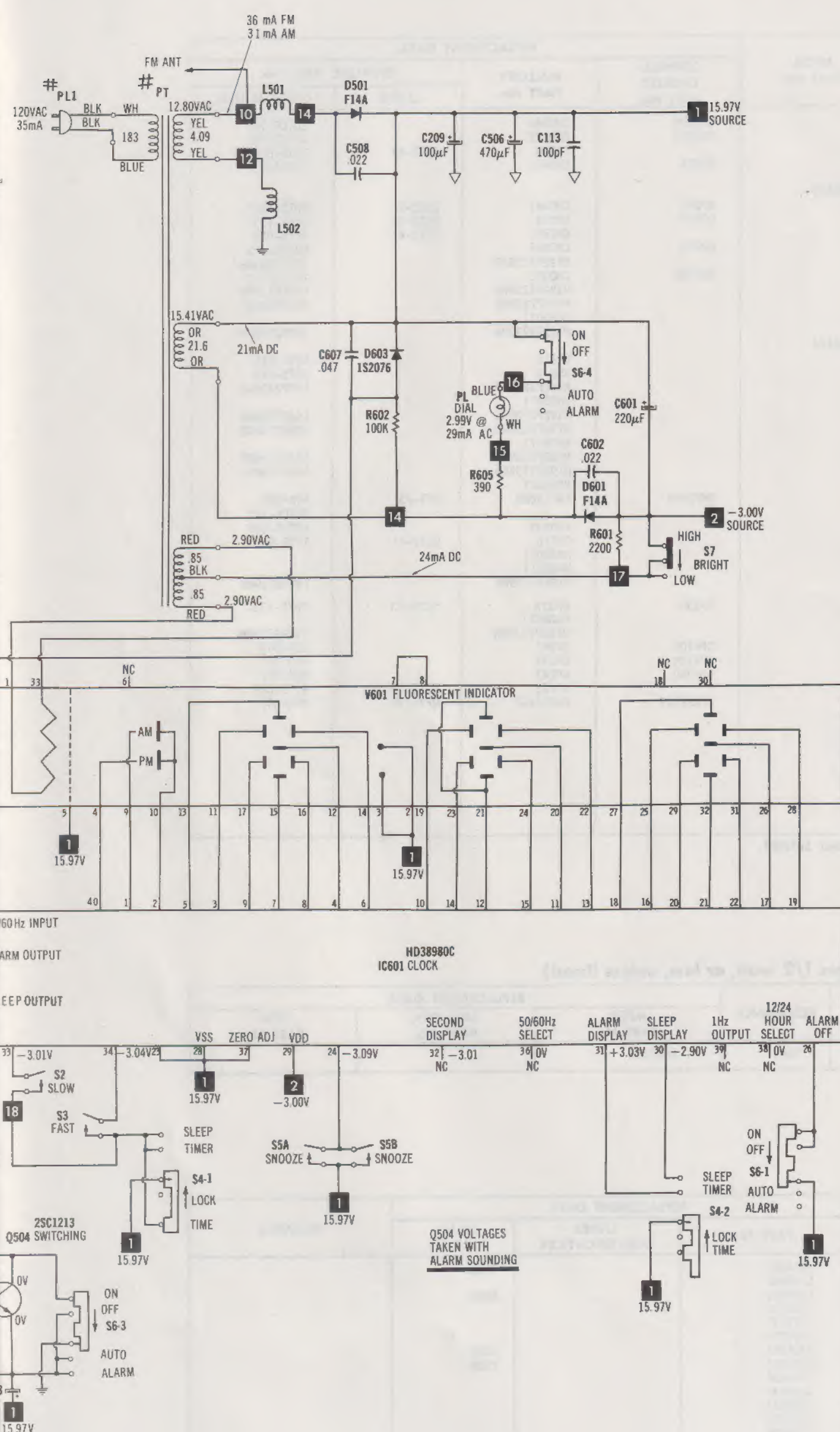
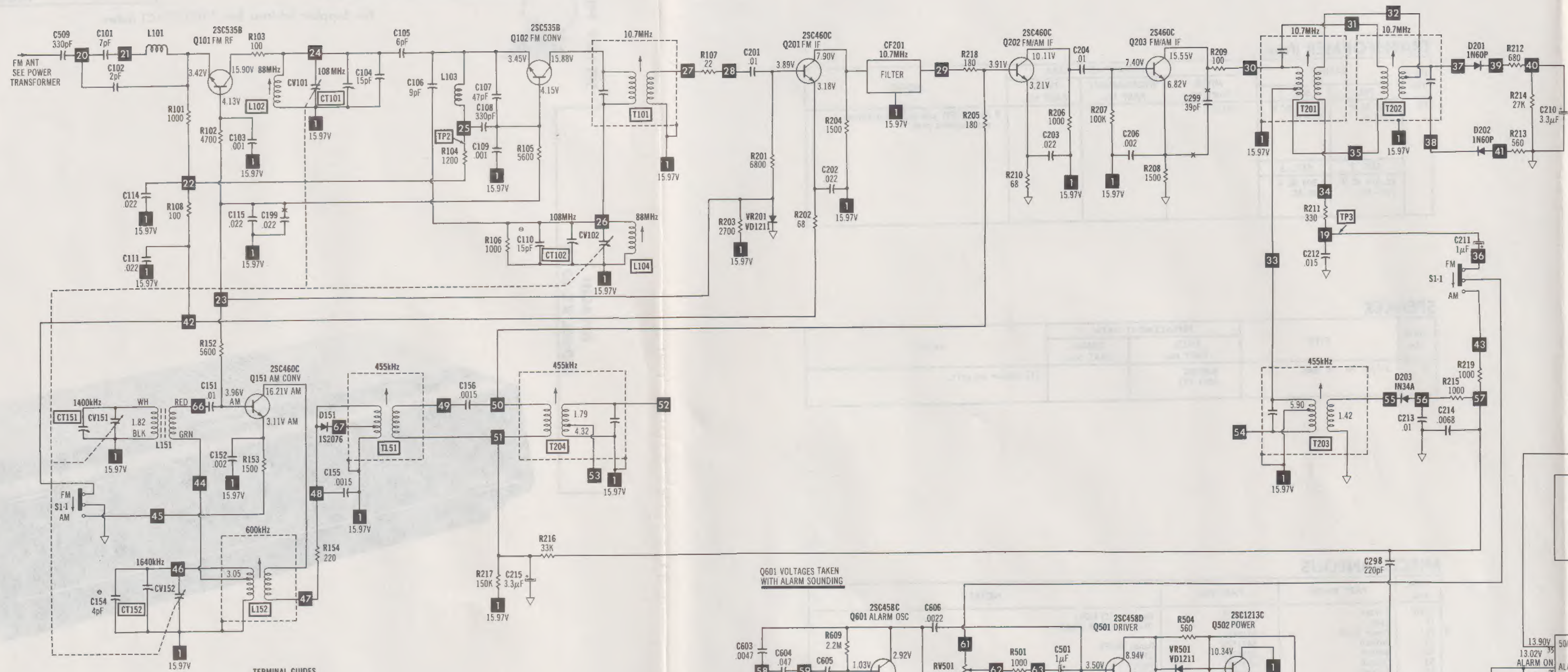
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80PK2438

DATE 2-80

SET 1879 FOLDER 3





DIAL CORD STRINGING



Tuning Gang
fully counterclockwise

Bottom View

Common tie point

Circuitry not used in some versions
Circuitry used in some versions
See parts list
Ground

Measurements with switching as shown
unless noted.

Item numbers in rectangles appear in the
alignment/adjustment instructions.

Supply voltage maintained as shown at input.

Voltages measured with digital meter, no signal.

Controls adjusted for normal operation.

Terminal identification may not be found on unit.

Resistors are 1/2W or less, 5% unless noted.

Value in () used in some versions.

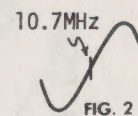
PHOTOFACT STANDARD NOTATION SCHEMATIC

WITH CIRCUITRACE

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ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Connect low sides of generator and indicator to ground unless specified otherwise. Maintain line voltage at 120V AC. Allow a 15-minute warm-up period. Use only enough generator output to obtain a suitable indication. Suggested Alignment Tools: GC ELECTRONICS: ALL Coils & Trimmers.....5000,8276,9089



AM ALIGNMENT—SELECTOR IN AM POSITION

Connect generator across loop fashioned of several turns of wire. Set volume at maximum.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
455kHz 400-hertz Modulation	Tuning gang fully open	Output meter across voice coil	T203,T204, T151	Adjust for maximum. Repeat until no further improvement is noted.
600kHz	600kHz	"	L152	Adjust for maximum.
1640kHz	1640kHz	"	CT152	Adjust for maximum.
1400kHz	1400kHz	"	CT151	Adjust for maximum. Repeat AM alignment until no further improvement is noted.

FM IF ALIGNMENT USING AM SIGNAL GENERATOR—SELECTOR IN FM POSITION

High side of generator thru .001uF to TP2.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz Modulated	Point of non- interference	AC probe of VTVM to speaker.	T202,T201, T101	Adjust for maximum.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR—SELECTOR IN FM POSITION

High side of generator thru .001uF to TP2. Use only enough marker signal for indication. Use 60-hertz, frequency-modulated signal, 450kHz sweep. Use 60-hertz sawtooth voltage in scope for horizontal deflection.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz 450kHz Sweep	Point of non- interference	Vert input of scope to TP3.	T202,T201, T101	Adjust T202 to place marker at center of S curve similar to Fig. 2. Readjust T201,T101 for maximum amplitude and straightness of line.

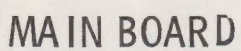
FM RF ALIGNMENT—SELECTOR IN FM POSITION

Connect generator across antenna terminals with 120-ohm carbon resistor in series with each lead. Adjustment of coils by bending should not be attempted unless the coil is deformed or replaced.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
88MHz Modulated	88MHz	AC probe of VTVM to speaker.	L104,L102	Adjust for maximum.
108MHz Modulated	108MHz	"	CT102, CT101	Adjust for maximum. Repeat FM RF steps until no further improvement is noted.

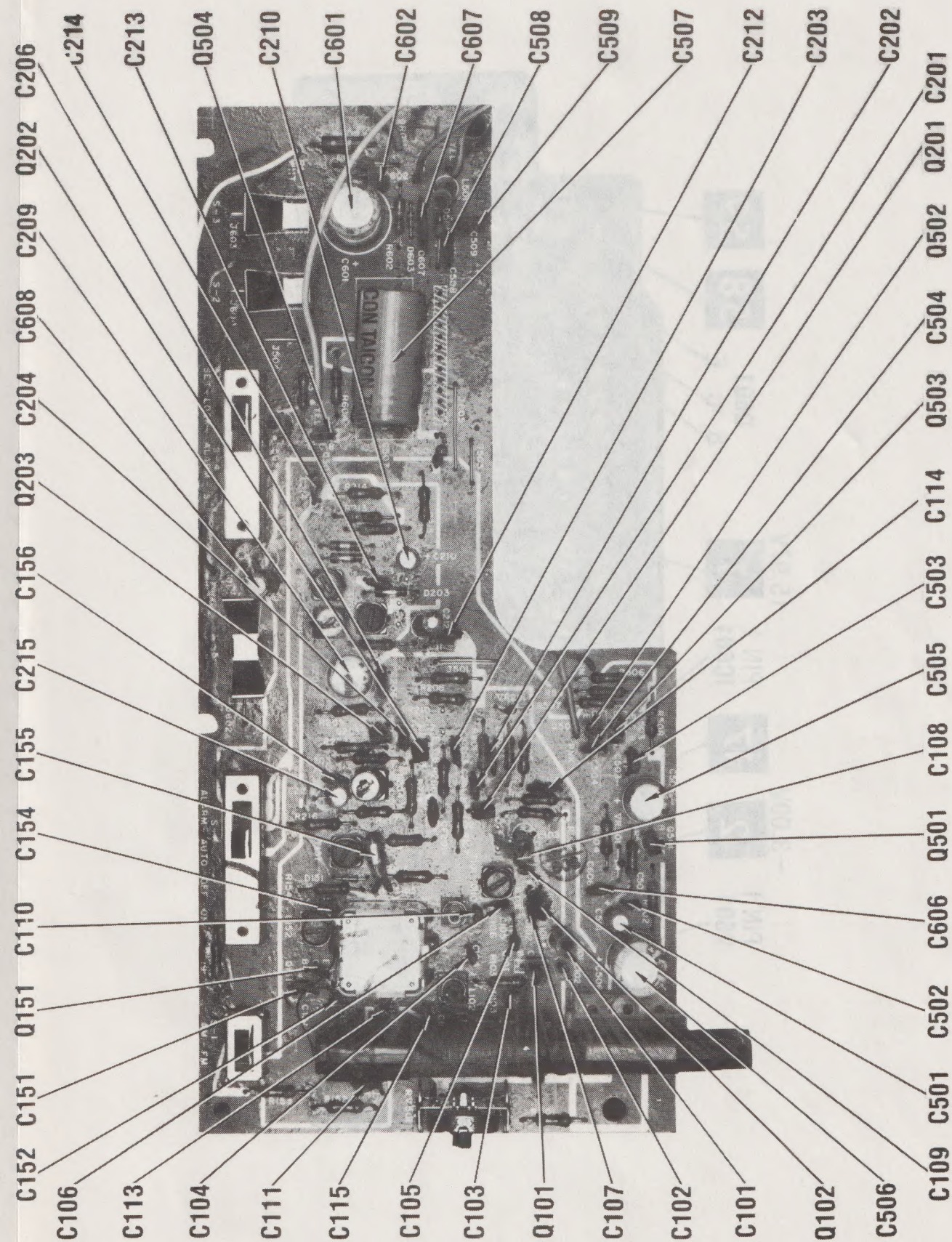
HITACHI
MODEL KC-671H

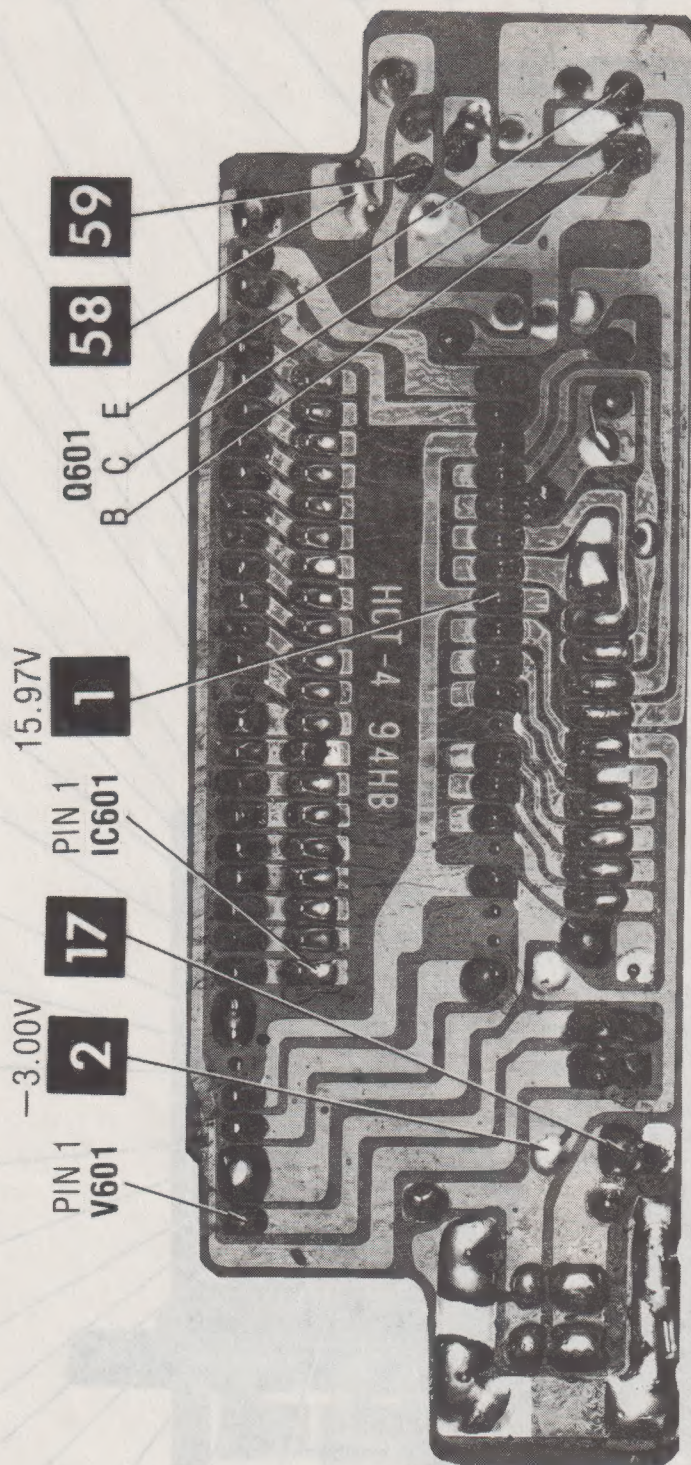
FOLDER 3



4

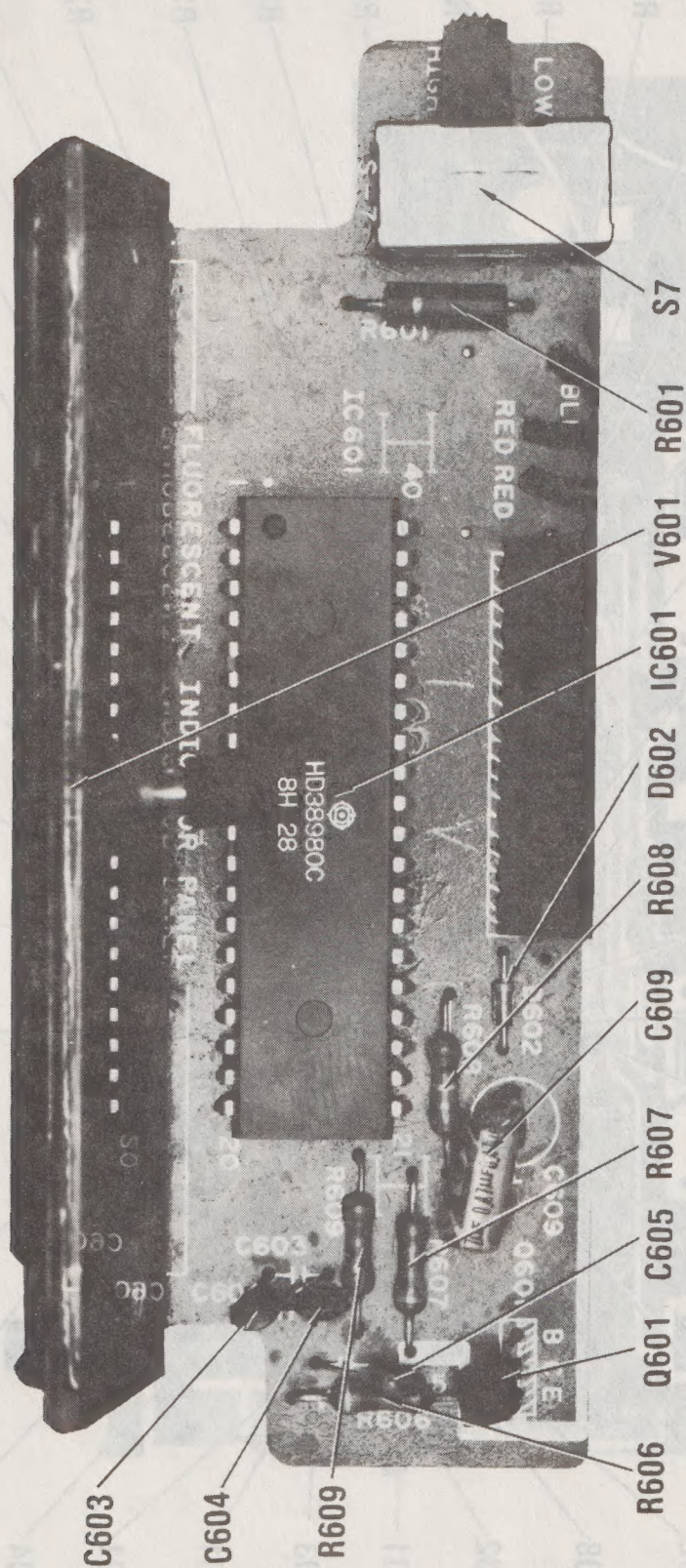
MAIN BOARD



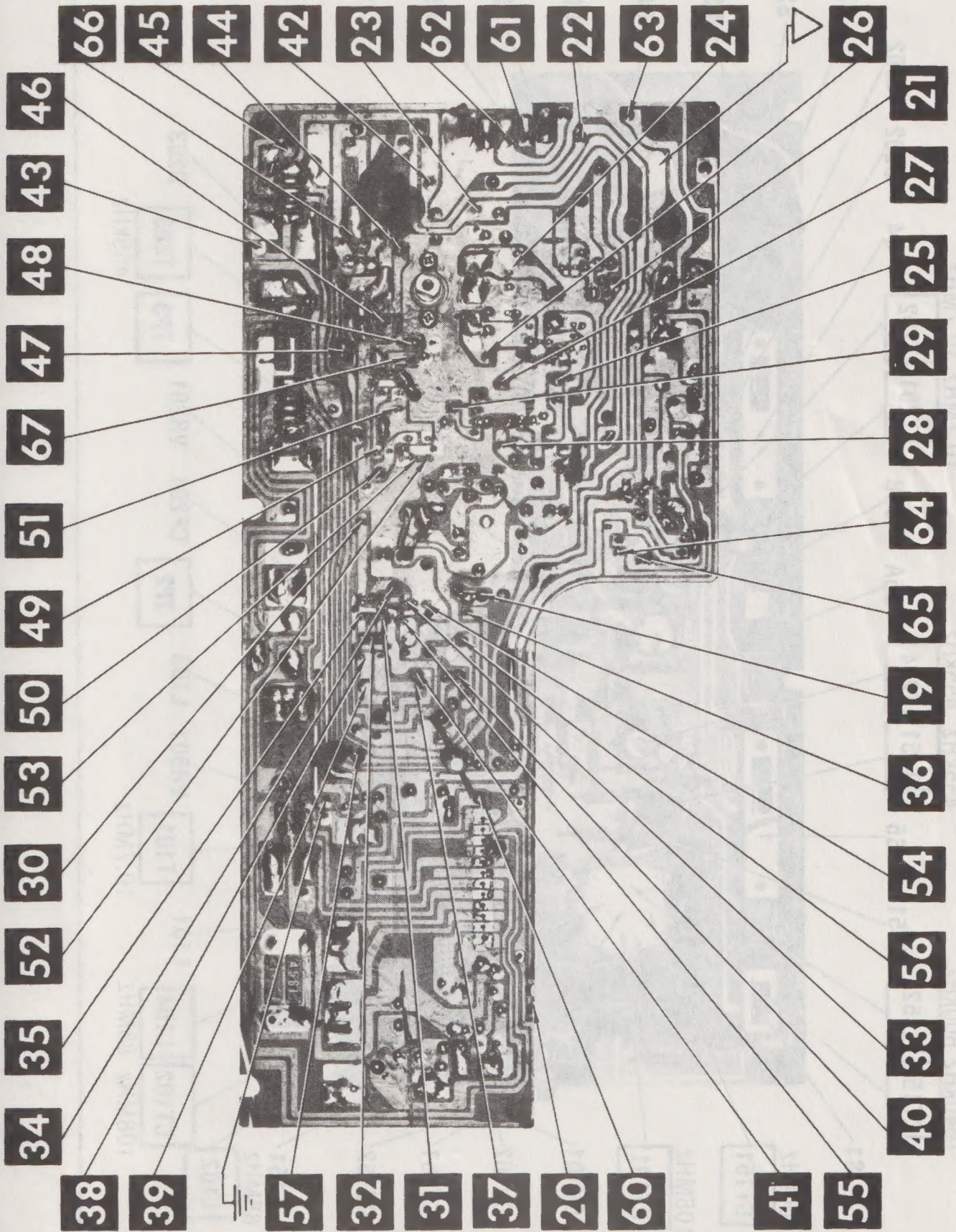


DISPLAY BOARD

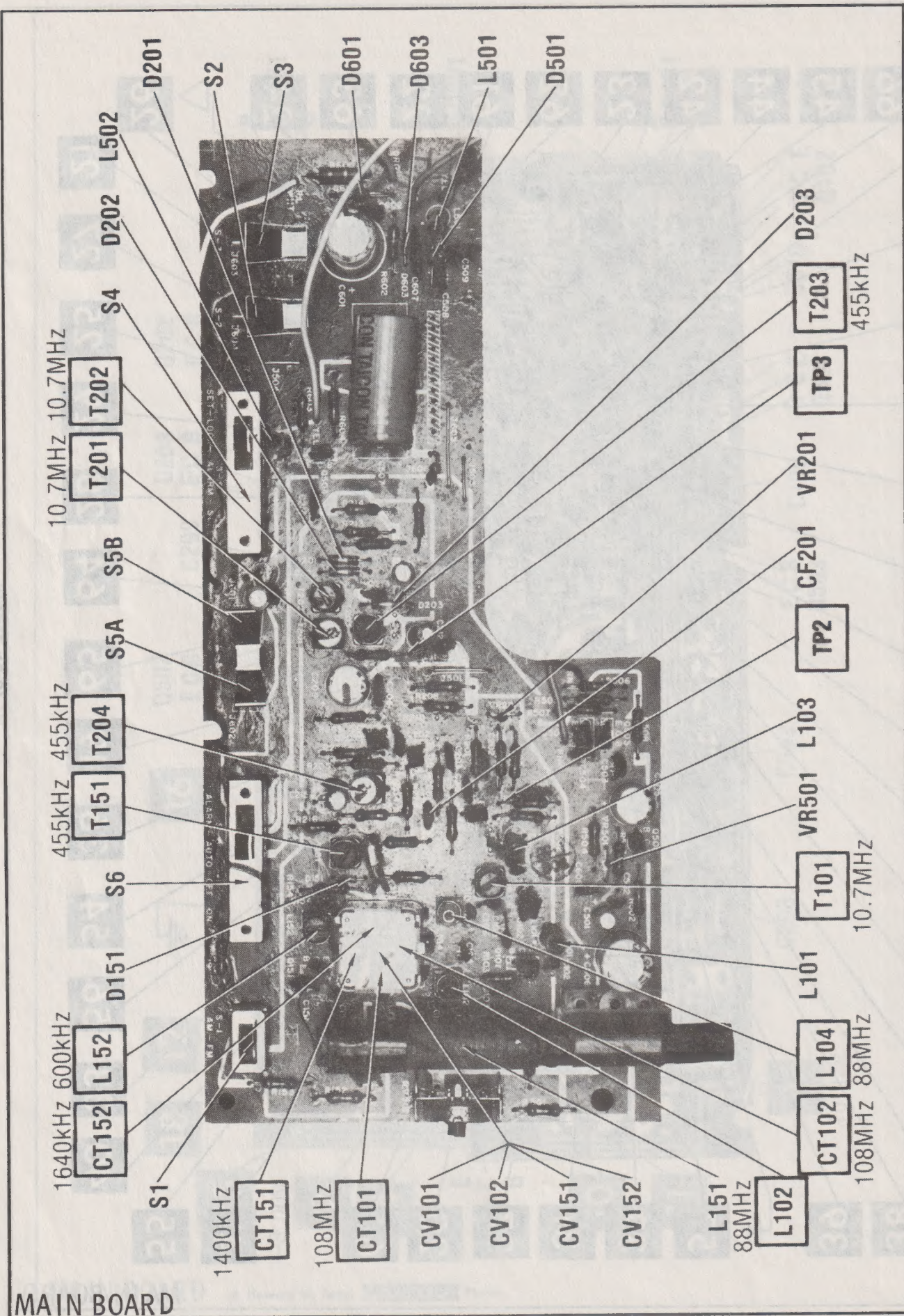
A Howard W. Sams CIRCUITRACE® Photo



DISPLAY BOARD



MAIN BOARD



MAIN BOARD

PARTS LIST AND DESCRIPTION

(When ordering parts, state Model, Part Number, and Description.)

WIRING DATA

General-use Unshielded Hook-up Wire	Use BELDEN No. 8528 (Solid) Available in 12 Colors
Power Cord	8522 (Stranded) Available in 12 Colors
	17106 (Plastic) or 17126 (Rubber) - 6 Ft.
	17109 (Plastic) or 17129 (Rubber) - 9 Ft.
Low-loss Shielded Lead (Interconnecting) .	Use BELDEN No. 8401 or 8421

SEMICONDUCTORS (Select replacement transistor for best results)

ITEM No.	TYPE No.	MFR. PART No.	REPLACEMENT DATA							
			GENERAL ELECTRIC PART No.	MALLORY PART No.	RAYTHEON PART No.	RCA PART No.	SYLVANIA PART No.	THORDARSON PART No.	WORKMAN PART No.	ZENITH PART No.
D151	1S2076	5330133	GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-131
D201	1N60P	5330732	1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134/109	103-Z9001
D202	1N60P	5330732	1N60	PTC206	REN 109	SK3088	ECG109	TM109/**	WEP134/109	103-Z9001
D203	1N34A	5330721	1N34AS	PTC207	REN 109	SK3087	ECG109	TM109/**	WEP134/109	103-Z9001
D501	F14A	5331201	GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D601	F14A	5331201	GE-504A	PTC201	REN 116	SK3311	ECG116	TM116	WEP156	212-76-02
D602	1S2076	5330133	GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-131
D603	1S2076	5330133	GE-514	PTC214	REN 177	SK3100/519	ECG519	TM519	WEP925/519	103-131
IC601	HD38980C	5359522								
Q101	2SC5358		GE-86	PTC132*	REN 229*	SK3293/107	ECG229*	TM229*/**	WEP535/107	121-Z9021*
	2SC535	0573510	GE-86	PTC132*	REN 229*	SK3293/107	ECG229*	TM229*/**	WEP535/107	121-Z9021*
Q102	2SC5358		GE-86	PTC132*	REN 229*	SK3293/107	ECG229*	TM229*/**	WEP535/107	121-Z9021*
	2SC535	0573510	GE-86	PTC132*	REN 229*	SK3293/107	ECG229*	TM229*/**	WEP535/107	121-Z9021*
Q151	2SC460C	0573487	GE-61*	PTC136*	REN 107	SK3122	ECG199	TM199/**	WEP460	121-522*
Q201	2SC460C	0573487	GE-61*	PTC136*	REN 107	SK3122	ECG199	TM199/**	WEP460	121-522*
Q202	2SC460C	0573487	GE-61*	PTC136*	REN 107	SK3122	ECG199	TM199/**	WEP460	121-522*
Q203	2SC460C	0573487	GE-61*	PTC136*	REN 107	SK3122	ECG199	TM199/**	WEP460	121-522*
Q501	2SC458D	5320064	GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9065
Q502	2SC1213C	5320613	GE-268	PTC123*	REN 289	SK3122	ECG289	TM289	WEP910/289	121-Z9065
Q503	2SA673C	5320593	GE-269	PTC103*	REN 290	SK3114/290	ECG290	TM290	WEP911/290	121-Z9003*
Q504	2SC1213C	5320613	GE-268	PTC123*	REN 289	SK3122	ECG289	TM289	WEP910/289	121-Z9065
	2SC1213		GE-268	PTC123*	REN 289	SK3122	ECG289	TM289	WEP910/289	121-Z9065
Q601	2SC458C	0573481	GE-210	PTC121*	REN 289	SK3124/289	ECG289	TM289/**	WEP458	121-Z9065
VR201	VD1211	5340202		PTC302		SK3864/605	ECG605	TM605		
VR501	VD1211	5340202		PTC302		SK3864/605	ECG605	TM605		

* Lead configuration may vary from original.
/** Also available as exact type replacement.

ELECTROLYTIC CAPACITORS

ITEM No.	RATING	REPLACEMENT DATA				
		MFR. PART No.	CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C209	100 16V		NLW25-12	TT10X25	QE1-291	TVA-1148
C210	3.3 25V		NLW4-50	VTT3R3A50	QV1-25	EV-1618.1
C211	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C215	3.3 50V		NLW4-50	VTT3R3A50	QV1-25	EV-1618.1
C501	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615
C505	100 16V		NLW25-12	TT10X25	QE1-291	TVA-1148
C506	470 16V		PC500-16	VTT470K16	QV1-151	EV-1251
C507	1000 25V		WBRI000-25*	VTT1000N25	QV1-185	EV-1360
C601	220 25V		PC250-25	VTT220K25	QV1-119	EV-1340
C608	10 25V		PC10-25	VTT10825		EV-1422
C609	.47 50V		PC1-50	VTT47A63	QV1-3	EV-1610
C699	1 50V		PC1-50	VTT1A50	QV1-11	EV-1615

PARTS LIST AND DESCRIPTION (CONTINUED)
(When ordering parts, state Model, Part Number, and Description.)

CAPACITORS

ITEM No.	RATING	MFR. PART No.	REPLACEMENT DATA			
			CORNELL-DUBILIER PART No.	MALLORY PART No.	SPRAGUE PART No.	
					Q-LINE	GENERAL LINE
C101	7 50V	0246429	NP06P8	CN0568	QCT2-41	10TCC-V68
C102	2 50V		NP02P2	CN0522		10TCC-V22
C103	.001 50V			GP210		10TS-D10
C104	15 NP0 50V		NP015	CN0415		10TCC-Q15
C105	6 50V					
C106	9 NP0				QCC2-26 QCT2-33 QCT2-41	10TCC-Q47
C107	47 50V		NP047	CN0447		10TS-T33
C108	330 50V		GP330	GP333		10TS-D10
C109	.001 50V			GP210		10TCC-Q15
C110	15 50V 5%		NP015	CN0415		192P2239R8
C111	.022 50V			M192P2239R8		10TCC-T10
C113	100 50V		NP0100	CN0310		192P2239R8
C114	.022 50V			M192P2239R8		192P2239R8
C115	.022 50V			M192P2239R8		192P2239R8
C151	.01 50V	0246424		MAG5011		
C152	.022 50V			M192P2239R8		192P2239R8
C154	4 50V +.5					
C155	.0015 50V			GP215		10TS-D15
C156	.0015 50V			GP215		10TS-D15
C199	.022 50V			M192P2239R8		192P2239R8
C201	.01 50V			MAG5011		
C202	.022 50V			M192P2239R8		192P2239R8
C203	.022 50V			M192P2239R8		192P2239R8
C204	.01 50V			MAG5011		
C206	.022 50V			M192P2239R8		192P2239R8
C212	.015 50V			M192P1539R8		192P1539R8
C213	.01 50V			MAG5011		
C214	.0068 50V		WMF1D68	EWFTA268	QF1-73	1PB-D68
C298	220 50V				QCT2-41	10TCC-T22
C299	39 50V			CN0439		10TCC-Q39
C502	.001 50V			GP210		10TS-D10
C503	.01 50V			MAG5011		
C504	.01 50V 10%			MAG5011		
C508	.022 50V	(1)		M192P2239R8	QCT2-33	192P2239R8
C509	330 50V 10%		GP330	GP333		10TS-T33
C510	.01 50V			MAG5011		
C602	.022 50V			M192P2239R8		192P2239R8
C603	.0047 50V		GP4700	GP247	QCT2-46 QF1-171	5GA-D47
C604	.0047 50V		GP4700	GP247		5GA-D47
C605	.0047 50V		GP4700	GP247		5GA-D47
C606	.0022 50V			GP222		10TS-D22
C607	.047 50V		DPMS2S47	EWFA1A147		1PB-S47
CT101						
CT102						
CT151						
CT152						
CV101						
CV102						
CV151						
CV152						

(1) Part of Tuning Gang Part Number 5052041.

CONTROLS (All wattages 1/2 watt, or less, unless listed)

ITEM No.	FUNCTION	RESISTANCE	REPLACEMENT DATA		
			MFR. PART No.	MALLORY PART No.	TRW PART No.
RV501	Volume	10K	5000361		

COILS (RF-IF)

ITEM No.	FUNCTION	REPLACEMENT DATA			REMARKS
		PART No.	OTHER IDENTIFICATION	MILLER PART No.	
L101	FM RF	0324003		4588	
L102	FM RF	5126482			
L103	FM RF	0324003		4588	
L104	FM Osc	5126312			
L151	AM Antenna	5113131			
L152	AM Osc	5120275			
L501	RF Choke	0324003		4588	
L502	RF Choke	0324003		4588	
T101	FM IF	5140024			
T151	AM IF	5130034			
T201	1st Discrimination	5148033			
T202	FM IF	5148034			
T203	AM IF	5130038			
T204	AM IF	5130031			

(When ordering parts, state Model, Part Number, and Description.)

ITEM No.	RATING		REPLACEMENT DATA			NOTES
			MFGR. PART No.	THORDARSON PART No.	TRIAD PART No.	
	PRI.	SEC. 1				
PT	120V AC @ 35mA AC	12,80V AC @ 36mA DC	5212271			# For SAFETY use only equivalent replacement part.
	SEC. 2	SEC. 3				
	15,41V AC @ 21mA DC	2,90V AC @ 24mA AC				

ITEM No.	TYPE	REPLACEMENT DATA		NOTES
		MFGR. PART No.	QUAM PART No.	
SP	3 5/8" PM 16 Ohms	5404061 4061 (1)		(1) Number on unit.

ITEM No.	PART NAME	PART No.	NOTES
CF201	Filter	5160211	Ceramic (CF107A)
PL	Lamp	5760822	Dial (2.99V @ 29mA)
PL1	Power Cord	5746441	
S1	Switch	5621123	Band, AM/FM
S2	Switch	6531521	Slow
S3	Switch	6531521	Fast
S4	Switch	5625051	Time/Lock/Timer/Sleep
S5	Switch	7282762	Snooze
S6	Switch	5625051	Alarm/Auto/Off/On
S7	Switch	5623551	Bright (Low-High)
V601	Indicator	5310201	Fluorescent

For SAFETY use only equivalent replacement part.

ITEM	PART No.	ITEM	PART No.
Bottom Case Assembly	6031131	Knob-Brightness	6296631
Button-Fast, Slow	6251111	Knob-Tuning	6281751
Button-Snooze	6250201	Knob-Volume	6281765
Clear Panel	6201781	Pointer	6395461
Knob-Alarm/Auto/Off/On,Time/Lock/Timer/ Sleep	6296551	Scale Plate	6467261
Knob-Band	6296571	Tuning Shaft	7581611
		Upper Case	6030541